

# Department of Veterans Affairs

Review of VA's Programs for Addressing Climate Change

#### **ACRONYMS AND ABBREVIATIONS**

E.O. Executive Order

OAEM Office of Asset Enterprise Management

OIG Office of Inspector General

OMB Office of Management and Budget

To Report Suspected Wrongdoing in VA Programs and Operations:

Telephone: 1-800-488-8244

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# Report Highlights: Review of VA's Programs for Addressing Climate Change

#### Why We Did This Review

We conducted this review in response to a February 25, 2013, request from the Congressional Bicameral Task Force on Climate Change to assess whether VA is doing all that it can to address this growing Specifically, the Task Force threat. requested that we identify applicable climate change requirements and determine VA's compliance in meeting those requirements. In addition, the Task Force asked that we assess VA's authority to reduce heat-trapping pollution emissions and make the Nation more resilient to the effects of climate change.

#### What We Found

VA partially complied with several key requirements and can do more to address climate change. VA has done considerable planning and met selected targets in the areas of energy management, management, and green buildings sustainability. However, VA did not meet selected targets for reducing greenhouse gas emissions and fleet petroleum consumption. This was due to factors such as significant growth in VA programs and competing operational standards and requirements. Since 2008, VA has increased staffing by 21 percent and expanded its fleet by 39 percent to better serve veteran needs, but this has posed a challenge to meeting certain targets.

Generally, VA had the authority needed to reduce heat-trapping pollution emissions and strengthen its resiliency to climate change effects.

#### What We Recommend

We recommended the Executive in Charge for the Office of Management and Chief Financial Officer coordinate with the Acting Assistant Secretary of the Office of Human Resources and Administration to implement existing telework expansion plans and to encourage VA employees to use alternative commuting forms of for reducing greenhouse gas emissions. The Executive in Charge should also identify additional strategies for meeting requirements to reduce both greenhouse gas emissions and fleet petroleum consumption.

#### **Agency Comments**

The Executive in Charge for the Office of Management and Chief Financial Officer concurred with our findings recommendations and provided technical revisions that we incorporated in our report as The Office of Human appropriate. Resources and Administration planned to work with the Office of Management to findings address the report recommendations. We will follow up on implementation of the recommendations.

LINDA A. HALLIDAY
Assistant Inspector General
for Audits and Evaluations

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#### INTRODUCTION

#### **Objectives**

We conducted this review in response to a February 25, 2013, request from the Congressional Bicameral Task Force on Climate Change to assess VA's compliance with applicable requirements for addressing climate change. The Task Force also requested that we assess VA's authority to reduce heat-trapping pollution (also known as greenhouse gas emissions) and make the Nation more resilient to the effects of climate change.

#### Climate Change Issues

Climate change is a significant and persistent change in an area's average climate conditions. It is not a single weather event; it is determined by the long-term pattern of temperature and precipitation averages and extremes at a location. Climate change effects, such as rising sea levels and increasing frequency and intensity of heat waves, droughts, and floods, impact nearly every aspect of society, from our ecosystems and infrastructure to our public health and economic and national security. The Federal Government has a responsibility to safeguard Federal services and resources to help manage climate-related risks by improving access to climate information, enhancing coordination and capacity, and leading and supporting actions that reduce vulnerability and increase resilience.

In February 2013, the Government Accountability Office added climate change to its list of high-risk Federal program areas. According to the Government Accountability Office, climate change poses not only environmental and economic risks but also a significant financial risk to the Government. The Government Accountability Office reported that the Federal Government is not well organized to address the fiscal exposure presented by climate change, partly because of the inherently complicated cross-cutting nature of the issue. Each agency has a unique responsibility in advancing toward a national adaptation strategy.

#### Climate Change Responsibilities Within VA

Within VA, the Office of Asset Enterprise Management (OAEM) is responsible for developing VA guidance on climate change planning. OAEM coordinates the submission of required climate change adaptation reports to the Council on Environmental Quality, the Office of Management and Budget (OMB), and other applicable oversight organizations. The Green Management Program within OAEM oversees the Department's implementation of Federal and VA climate change adaptation policy. Through a combination of risk mitigation strategies and adaptation planning, VA expects to increase its ability to recover from or adjust to climate change, thereby improving its resiliency.

#### Other Information

- Appendix A provides additional background information.
- Appendix B outlines the scope and methodology for our review.
- Appendix C provides Managements comments to this report.

#### RESULTS AND RECOMMENDATIONS

#### Finding VA Can Do More To Address Climate Change

VA partially complied with several key requirements for addressing climate change. VA has conducted considerable planning and met selected targets in the areas of energy management, water management, and green buildings sustainability. However, VA did not meet selected targets for reducing greenhouse gas emissions and fleet petroleum consumption. This was due to factors such as significant growth in VA programs and competing operational standards and regulatory requirements. VA needs to implement existing telework expansion plans and encourage employees to use alternative forms of commuting for reducing greenhouse gas emissions. VA also needs to identify additional strategies for meeting requirements to reduce both greenhouse gas emissions and fleet petroleum consumption. Generally, VA had the authority needed to reduce heat-trapping pollution emissions and strengthen its resiliency to climate change effects.

#### **Key Directives**

VA must comply with applicable climate change planning requirements found in criteria such as executive orders and memoranda, laws, and regulations. We determined that the following directives provide the primary requirements for VA to manage climate change.

- National Energy Conservation Policy Act of 1978—The underlying authority for Federal energy management goals and requirements. This act requires Federal agencies to submit a report annually to the Department of Energy on the agency's efforts to meet energy management requirements.
- **Energy Policy Act of 2005**—Defines performance standards for energy and water management.
- Executive Order (E.O.) 13423, Strengthening Federal Environmental, Energy, and Transportation Management—Dated January 24, 2007, sets sustainability goals for Federal agency operations and directs agencies to improve their environmental, energy, and economic performance.
- Energy Independence and Security Act of 2007—Governs initiatives to move the Nation toward energy independence and security.
- E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance—Dated October 5, 2009, requires agencies to develop strategic sustainability performance plans focused on cost-effective projects and programs and to reduce greenhouse gas emissions.

- Federal Agency Climate Change Adaptation Planning Implementing Instruction for E.O. 13514—Dated March 4, 2011, requires Federal agencies to integrate climate change adaptation into agency policies and practices.
- Presidential Memorandum on Federal Fleet Performance—Dated May 24, 2011, directs Federal agencies to implement Government-wide fleet management practices, including purchase of alternative fuel vehicles and decrease in petroleum consumption.

OMB uses key targets identified in these collective criteria to annually prepare a scorecard on Federal agencies' performance in addressing climate change. The performance targets are categorized into the following five program areas.

- Energy Management
- Water Management
- Sustainable Green Buildings
- Greenhouse Gas Emissions
- Fleet Petroleum Consumption

## Addressing Requirements

VA has conducted considerable planning to support its efforts to meet the requirements for addressing climate change. For example, VA develops an annual Strategic Sustainability Performance Plan (Sustainability Plan) in accordance with E.O. 13514. The plan identifies VA's sustainability goals, defines a strategy, and prioritizes actions for meeting those goals. VA also prepares an annual Energy Management Report, Sustainable Buildings Implementation Plan, Greenhouse Gas Inventory Report, Vehicle Fleet Management Action Plan, and Alternative Fuel Vehicle Report. VA develops and submits these plans and reports as required to the applicable oversight organizations, including OMB, the Department of Energy, and the Council on Environmental Quality.

#### Meeting Key Targets

Based on the January 2013 OMB Scorecard on Sustainability/Energy, we determined that VA met the performance targets for addressing climate change in three of the five program areas—Energy Management, Water Management, and Sustainable Green Buildings. VA's challenges in meeting the targets in the two remaining areas, Greenhouse Gas Emissions and Fleet Petroleum Consumption, were due to significant growth in VA programs and competing operational standards and regulatory requirements.

Table 1 summarizes VA's performance in meeting key requirements for addressing climate change in the five program areas during FY 2012.

Table 1. VA Performance in Meeting Key Climate Change Targets						
Program Area	Target Performance	Actual Performance	Target Met?			
Alta			Yes	No		
Energy Management	• Reduce building energy intensity by 21% in FY 2012	• Building energy intensity reduced by 21.4%	√			
	• Achieve 5% renewable energy consumption in FY 2012	• Achieved 13.2% in renewably fueled electricity consumption	$\sqrt{}$			
Water Management	• Reduce Potable water consumption by 10 % in FY 2012	• Potable water consumption reduced by 24.3%	√			
Sustainable Green Buildings	Achieve 9% sustainable buildings in FY 2012	Achieved 9.21% sustainable buildings	√			
Greenhouse Gas	• Reduce Scope 1 & 2 by 6% in FY 2012	• Scope 1 & 2 reduced by 5.8%		$\sqrt{}$		
Emissions*	• Reduce Scope 3 by 2% in FY 2012	• Scope 3 increased by 18.8%		$\sqrt{}$		
Fleet Petroleum Consumption	• Reduce fuel consumption by at least 14% in FY 2012	• Increased fuel consumption by 2.5%		V		

Source: January 2013 OMB Scorecard on Sustainability/Energy and VA's Strategic Sustainability Performance Plan, dated June 2012. We did not validate the VA performance data reported.

\*Note: Scope 1 greenhouse gas emissions are from sources that are owned or controlled by a Federal agency. Scope 2 greenhouse gas emissions are generated from electricity, heat, or steam purchased by a Federal agency. Scope 3 greenhouse gas emissions are from sources not owned or directly controlled by a Federal agency but related to agency activities.

#### Energy Management

VA met FY 2012 targets for reducing building energy intensity and increasing use of renewable energy. According to the January 2013 OMB Scorecard, VA was also on track to meet its long-term performance requirements for energy management by FY 2015. VA met these targets through a combination of energy conservation measures and installation of onsite renewable energy systems. In addition, VA undertook onsite renewable energy projects involving solar, wind, geothermal power, and combined heat and power. VA also applied cross-cutting management approaches involving environmental and energy impact decision making.

#### Water Management

VA exceeded the FY 2012 target to reduce potable water consumption by 10 percent and is on track to meet the overall goal of 26 percent by FY 2020. According to OAEM's FY 2012 Energy Narrative, VA entities identified

potential water conservation measures during energy assessments. Further, VA completed installation of 3,200 advanced non-electric meters to monitor steam, chilled water, natural gas, water consumption, and almost 1,400 electric meters.

#### Sustainable Green Buildings

VA met the 9 percent target for the number of sustainable buildings in FY 2012. In 2010, VA awarded a contract for a third-party assessment of all VA medical facilities, which occurred in 2011 and 2012. With these assessments, VA pursued sustainability in existing facilities and, according to the FY 2014 Congressional Budget Submission, had more than 300 sustainable buildings. VA also had 30 Energy Star-labeled medical facilities, which accounted for over 25 percent of the U.S hospitals listed in the Energy Star Portfolio Manager. With such accomplishments, VA has the potential to meet the required target of 15 percent of sustainable buildings by FY 2015.

#### Greenhouse Gas Emissions

VA did not meet its FY 2012 targets for reducing greenhouse gas emissions. Greenhouse gas emissions are categorized according to scope or the amount of control VA has over the emissions.

- Scope 1 greenhouse gas emissions are from sources that are owned or controlled by a Federal agency.
- Scope 2 greenhouse gas emissions are generated from electricity, heat, or steam purchased by a Federal agency.
- Scope 3 greenhouse gas emissions are from sources not owned or directly controlled by a Federal agency but related to agency activities. Scope 3 greenhouse gas emissions include employee business travel, Federal employee commuting, and contracted waste disposal.

E.O. 13514 requires VA to identify and report an annual comprehensive greenhouse gas inventory beginning in FY 2010 and to establish FY 2020 annual greenhouse gas emission reduction targets relative to a FY 2008 baseline. VA established a combined Scope 1 & 2 reduction target of 29.8 percent and a Scope 3 reduction target of 10 percent. Although not required in E.O. 13514, VA also established annual targets to measure progress toward long-term goals, as required by OMB. For FY 2012, VA's combined Scope 1 & 2 reduction target was 6 percent; its Scope 3 reduction target was 2 percent.

VA missed its FY 2012 Scope 1 & 2 greenhouse gas emissions target of 6 percent by 0.2 percent. Despite significant increases in the number of patients and its square footage owned or leased, VA was able to reduce its emissions by 5.8 percent. This was done by a reduction in energy intensity and funding renewable energy projects at VA facilities. Although VA expects to meet the FY 2020 Scope 1 & 2 greenhouse gas emissions reduction goal through continued reduction in energy intensity and

development of these projects, Green Management Program personnel emphasized the long-term nature of this process. In the short term, VA will continue to purchase renewable energy certificates to help reduce its Scope 1 & 2 greenhouse gas emissions. These certificates are considered equivalent to purchasing renewable energy and contribute to VA meeting its environmental goals.

VA did not meet its FY 2012 goal to reduce Scope 3 greenhouse gas emissions by 2 percent. Although Scope 3 greenhouse gas emissions decreased 1.9 percent from 2011, VA still exceeded the 2008 baseline by 18.8 percent. VA did not reduce Scope 3 greenhouse gas emissions because of an increase in the veteran population and a corresponding increase in the number of employees needed to address the increasing mission. From 2008 to 2012, VA's full-time employees increased from nearly 249,500 to almost 302,300 (over 21 percent). Approximately 81 percent of VA's Scope 3 greenhouse gas emissions consist of commuting Federal employees. Green Management Program personnel stated that VA had less control over Scope 3 than Scopes 1 & 2 because it could not direct employees to telework or tell employees how to commute.

VA officials stated that the Department has a plan to expand telework, which may help reduce greenhouse gas emissions. By the end of FY 2013, VA would like to have about 16,600 (5 percent) of its total employees teleworking and about 9,900 (3 percent) of the total employees teleworking 3 or more days per week. VA's telework eligible employees grew 2 percent from April 2012 to May 2013, and it has met the goal of 5 percent of its total employees teleworking. However, VA officials stated that they do not expect the Department to meet all of its telework goals. As of April 2013, less than 1 percent of VA's employees teleworked at least 3 days per week.

VA expects to increase telework through expanded outreach efforts and enhanced training. In addition, VA's Real Property Cost Savings and Innovation Plan identifies strategies for expanding telework that are expected to help reduce greenhouse gas emissions. Strategies include review of telework classifications to ensure jobs are appropriately classified, increasing the number of employees teleworking 3 or more days a week, establishing space-sharing requirements, and terminating costly leases in geographic areas of concentrated telework. Greenhouse gas reductions could also be achieved through Departmental efforts to encourage employees to use alternative forms of commuting (for example, public transit, biking, walking, and carpooling).

Fleet Petroleum Consumption VA did not meet the requirement to reduce fleet petroleum consumption by 14 percent in FY 2012. Rather, VA's fleet petroleum use increased and exceeded the target by 16.5 percentage points. VA's Strategic Sustainability Performance Plan, dated June 2012, states that meeting fuel consumption

reduction goals was a significant challenge due to the Department's growing mission. Specifically, an increase in fleet size was necessary to conduct outreach programs and home-based patient care, especially in rural areas. VA's fleet grew by about 39 percent between FY 2008 and FY 2012. Many expanded health care programs in rural areas did not have alternative fuel filling stations readily available for alternative fuel vehicles. Also, VA received and used donated vehicles that did not have alternative fuel capability. Such conditions hindered VA in meeting its petroleum consumption reduction targets.

Although VA did not meet the FY 2012 goal to reduce petroleum consumption, falling short of the target by 16.5 percent, VA has demonstrated a commitment to meeting the goal. For example, VA decreased its petroleum consumption by 4 percent from FY 2011 to 2012 and increased its use of alternative vehicle fuels about 24 percent over the same period. Further, VA encourages the acquisition of alternative fuel vehicles whenever possible and requires that all new vehicle purchases have low greenhouse gas emissions whenever available.

VA has an ongoing program to install onsite alternative fueling stations, with 45 E-85<sup>1</sup> stations and 11 electric vehicle charging stations installed as of FY 2012. VA officials also stated they intend to replace 54 GSA leased petroleum fuel vehicles with plug-in electric vehicles. VA policy requires defaulting to the smallest vehicle type that will fulfill a mission need. Additionally, VA is examining the use of external car-sharing programs, such as Zipcar, and promoting vehicle sharing across Departmental entities that cannot justify maintaining full-time vehicles.

Reducing Greenhouse Gas Emissions Generally, VA had the authority needed to reduce heat-trapping pollution emissions. VA reduced Scope 1 & 2 greenhouse gas emissions through reductions in energy intensity, increases in renewable energy projects, and the use of renewable energy certificates. Although VA has not yet met the target for Scope 3 greenhouse gas emissions reduction, it does have a plan to decrease greenhouse gas emissions by expanding telework and reducing Federal employee commuting.

VA officials stated that they would like some additional authority concerning flexibility to fuel non-VA fleet vehicles, extend utility agreements, use design-build contracts, and trade emissions credits. It submitted proposals for these areas to the Office of Congressional and Legislative Affairs for the FY 2015 budget cycle.

Strengthening Resiliency

VA also has adequate authority to work toward making the Nation more resilient to the effects of climate change. VA met the requirements related to climate change adaptation planning. E.O. 13514 requires VA to evaluate

<sup>&</sup>lt;sup>1</sup> E-85 is a blend of 85 percent ethanol and 15 percent gasoline used in flexible fuel vehicles.

agency climate change risks and vulnerabilities and to manage the effects of climate change on its operations and programs. In response, VA established a climate change adaptation planning directive, conducted a Department-wide high-level climate change vulnerability analysis, and developed a climate change adaptation plan based on its analysis.

#### **Conclusion**

VA has complied with most mandates and statutory requirements, successfully meeting energy, water, and sustainable green buildings goals. However, VA faces challenges in meeting greenhouse gas emissions and fleet petroleum consumption reduction targets per the most currently reported information. VA would benefit from implementing existing plans to expand telework and identifying additional strategies for meeting these requirements. VA continues to demonstrate a commitment to addressing the high-risk climate change concern in balance with providing health care services and other benefits to our Nation's veterans. Since VA has complied with most requirements for addressing climate change and documented its vulnerabilities, we concluded, and VA officials agree, that no additional authority is needed.

#### Recommendations

- 1. We recommend the Executive in Charge for the Office of Management and Chief Financial Officer coordinate with the Acting Assistant Secretary of the Office of Human Resources and Administration to implement existing telework expansion plans for reducing greenhouse gas emissions and to encourage VA employees to use alternative forms of commuting.
- 2. We recommend the Executive in Charge for the Office of Management and Chief Financial Officer identify additional strategies for meeting requirements to reduce greenhouse gas emissions.
- 3. We recommend the Executive in Charge for the Office of Management and Chief Financial Officer identify additional strategies for meeting requirements to reduce fleet petroleum consumption.

Management Comments and OIG Response The Executive in Charge for the Office of Management and Chief Financial Officer concurred with our report findings and recommendations. The Office of Human Resources and Administration planned to work with the Office of Management to address the report findings and recommendations. We will follow up on implementation of the recommendations.

#### Appendix A Background

VA's primary responsibility is to care for America's veterans, their families, and survivors. As VA seeks to provide veterans with high-quality service, the agency must also adapt to the challenges and address the effects of climate change. Per Federal and regulatory guidance, VA must be committed to meeting the challenges a changing climate poses to the VA workforce and our Nation as whole.

In October 2009, President Obama signed Executive Order 13514, Federal Leadership Environment, Energy, and Economic Performance. This Executive Order requires reductions in greenhouse gas emissions, fuel, energy, and water. In September 2010, the VA Secretary signed the Sustainability Management Policy Memorandum, which committed the Department to complying with legislation such as E.O. 13514, the Energy Independence and Security Act of 2007, and the Energy Policy Act of 2005. The criteria in these directives require Federal agencies to develop and meet numerous reports, performance targets, and plans such as the Strategic Sustainability Performance Plan, the climate change adaptation policy, and the fleet management action plan.

The Office of Asset Enterprise Management (OAEM) is responsible for defining VA's guidelines for climate change adaptation planning and coordinating the submission of required climate change adaptation reports to the Council on Environmental Quality, OMB, and other applicable oversight organizations. The Green Management Program Service reports to OAEM and oversees the implementation of climate change policy.

#### Appendix B Scope and Methodology

#### Scope

We conducted our review work from March 2013 through May 2013 at VA Central Office located in Washington, D.C. Our review focused on assessing VA's compliance with existing climate change requirements, its progress in reducing greenhouse gas emissions, and its integration of climate change adaptation planning into its policies and procedures.

#### Methodology

To assess VA's compliance with existing climate change requirements, we reviewed applicable legislation, regulations, executive orders, VA Directives, and identified requirements. While we did not assess them for accuracy or completeness, we reviewed various plans and reports that VA developed to support its efforts to address climate change. We assessed VA progress in meeting the requirements, including greenhouse gas emission reductions, by reviewing the January and 2013 OMB 2012 Scorecards Sustainability/Energy, the June 2012 Strategic Sustainability Performance Plan, and data excerpts from the greenhouse gas reporting portal. discussed the review results with Green Management Program Service officials, reviewed additional supporting documentation when necessary, and documented the results.

To assess VA's progress in integrating climate change adaptation planning into its policies and procedures, we identified requirements in the Council on Environmental Quality Chair's Implementing Instructions and obtained supporting documentation showing where the Department had met the requirements. We discussed the results with Green Management Program Service officials.

#### Data Reliability

To assess the reliability of VA's progress in reducing greenhouse gas emissions, we discussed with agency officials the data quality control procedures and reviewed the 2013 greenhouse gas Inventory Qualitative Report section. We also discussed data validation procedures with agency officials. We did not perform any additional data reliability testing or review any additional corroborating evidence from alternative databases. We believe these procedures were sufficient to support our limited-scope review objective.

#### Government Standards

We conducted our review to respond to specific questions from the Congressional Bicameral Task Force on Climate Change. We performed our work to address the Task Force's issues and did not use specific standards. However, we took steps to ensure the staff assigned was independent, which is consistent with the Council of Inspectors General on Integrity and Efficiency *Quality Standards for Inspection*.

## Appendix C Executive in Charge for the Office of Management Comments

# **Department of Veterans Affairs**

### **Memorandum**

Date: June 21, 2013

Executive in Charge, Office of Management, and Chief Financial Officer (004)

Subj: Office of Management Comments on OIG Draft, "Review of VA's Programs for Addressing Climate Change"

To: Assistant Inspector General for Audits and Evaluations (52)

- 1. The Office of Management (OM) appreciates the opportunity to revies and comment on the OIG Draft Report, "Review of VA's Programs for Addressing Climate Change." I concur with the OIG findings and recommendations.
- Attached are OM's requested changes for OIG consideration. Also attached, for reference purposes, are copies of the report pages where our recommended changes would be reflected.
- 3. If you have any questions, please call me or have a member of your staff contact Cvnthia Codova. Office of Asset Enterprise Management, at (202) 632-5999.

Helen Tierney

Attachments

<sup>\*</sup>We made minor technical revisions throughout our report as appropriate and did not include a copy of the Office of Management's recommended changes in this Appendix.

# Appendix D Office of Inspector General Contact and Staff Acknowledgments

OIG Contact	For more information about this report, please contact the Office of Inspector General at (202) 461-4720.
Acknowledgments	Julius Hoffman, Director Ruth Blevins Sheila Brown Keesha Chapman Felicia Stovall

#### **Appendix E** Report Distribution

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